

Remarks

This paper is being submitted in response to the Notice of Non-Compliant Amendment, mailed on April 29, 2008. The original amendment was submitted in response to a non-final office action, and this paper is submitted within the one-month period for reply. In all other respects, this response is identical to the non-compliant response filed on March 31, 2008.

Claims 1, 8 and 15 have been amended. No new matter has been added by way of these amendments.

Rejections under 35 USC 102

Applicant has amended the independent claims 1, 8 and 15 to render more clearly the differences over the newly cited reference Bargach et al.

Specifically, the main claims of the present application have been amended to recite: i) “*wherein each delta value is calculated by taking a difference between a parameter of said first and second log data*” and ii) displaying said correlation on a display device so that changes for the wellbore interval can be evaluated “*as well the probable causal event responsible for the changes*”.

The amended feature i) is described on paragraph 33, wherein a delta value for a formation parameter is calculated by taking the difference between data associated with a parameter for the different logging passes. Examiner points to the figure on page 62 of Bargach with Track 4 representing VISION resistivities, but there is no teaching of calculating a delta value by taking the difference. Instead track 4 is merely shown to represent Vision resistivities, specifically attenuation and phase-shift. Not only are these different parameters, but there is no indication of calculating a difference.

The amended feature ii) is described in paragraph [0046] of the present application (second sentence), wherein the invention allows the determination of a change, but also the identification of the probable causal event of the change. This further effect of determined the cause from the observed effect is accomplished by the already claimed step of ‘identifying a correlation’ (see also see paragraph [0035]). Thus, using the further correlation analysis the claimed invention is able to display to the user a probably cause of the wellbore change.

Examiner argues that this claimed step of “displaying the correlation” is disclosed by figure 1 on page 72 of Bargach. However, this figure merely explains how invasion and the increase of borehole failures affect resistivity measurements. There is no display of the probable cause for the changes in resistivity. This is because Bargach already assumes the cause for the changes in resistivity is due to invasion and borehole failures, without performing a further ‘correlation’ step to confirm that either invasion or borehole failures are probable causes.

Examiner will appreciate that the present application is even more powerful in that the further ‘correlation’ step of the present application enables the display of other possible causes for a change that the interpreter/user might not have considered.

This paper is submitted in response to the Notice of Non-Compliant Amendment mailed on April 29, 2008, for which the one-month date for response is May 29, 2008. Please apply any charges not covered, or any credits, to Deposit Account 50-2183 (Reference Number 21.1068).

Respectfully submitted,

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/James L. Kurka/

James L. Kurka, Reg. No. 47,726
Schlumberger Technology Corporation
200 Gillingham Lane, MD 9
Sugar Land, TX 77478
Telephone: (281) 285-7114
Facsimile: (281) 285-8821